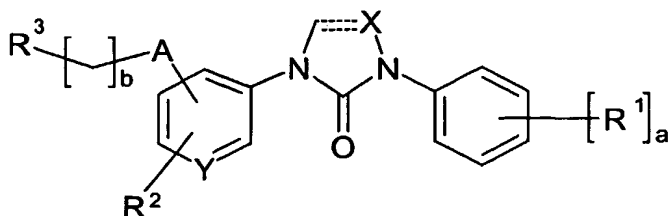


Claims

1. A compound of formula (I):



(I)

5 wherein:

a is 0, 1, 2, 3, 4 or 5;

b is 1, 2 or 3;

Y is nitrogen or carbon;

A is oxygen, nitrogen, -CONH-, -NHCO- or together with R² form a benzoxazolone group;

10 R¹ is halogen, C₁₋₆alkyl, C₁₋₆alkoxy, C₁₋₆alkylthio, hydroxy, amino, mono- or di-C₁₋₆alkylamino, nitro, CN, CF₃, OCF₃, aryl, arylC₁₋₆alkyl, arylC₁₋₆alkyloxy or arylC₁₋₆alkylthio;

R² is hydrogen, halogen, C₁₋₆alkyl, C₁₋₆alkoxy, haloC₁₋₆alkyl or haloC₁₋₆alkoxy;

R³ is:

- 15 (i) -NR⁴R⁵ where R⁴ and R⁵ are independently hydrogen, C₁₋₆alkyl or arylC₁₋₆alkyl; or
 (ii) an optionally substituted N-linked heterocycle; or
 (iii) an optionally substituted C-linked heterocycle;

20 ----- is a single bond or a double bond;

X is CH₂ or C=O (when ----- is a single bond) or X is CH (when ----- is a double bond).

2. A compound as claimed in claim 1, wherein a is 1 or 2.

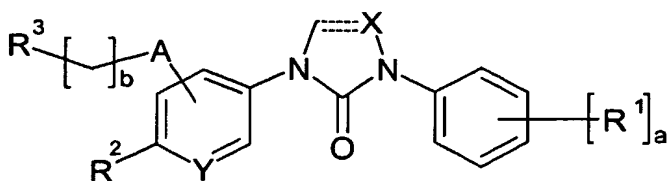
3. A compound as claimed in claim 1 or claim 2, wherein R¹ is halogen.

25 4. A compound as claimed in claim 1, 2 or 3, wherein R¹ is at the 3 position or the 4 position.

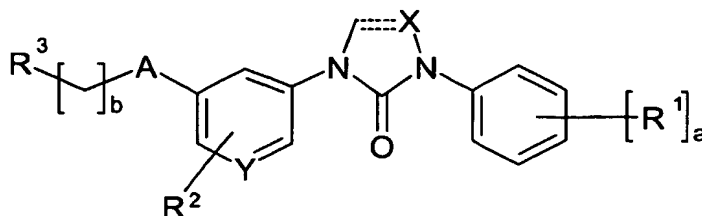
5. A compound as claimed in any of claims 1 to 4, wherein X is CH₂ and ----- represents a single bond or X is CH and ----- represents a double bond.

6. A compound as claimed in any of claims 1 to 6, wherein Y is carbon.

30 7. A compound as claimed in any of claims 1 to 6, wherein R² is at the following position:



8. A compound as claimed in any of claims 1 to 7, wherein R^2 is C_{1-6} alkoxy.
9. A compound as claimed in any of claims 1 to 8, wherein A is at the following position:

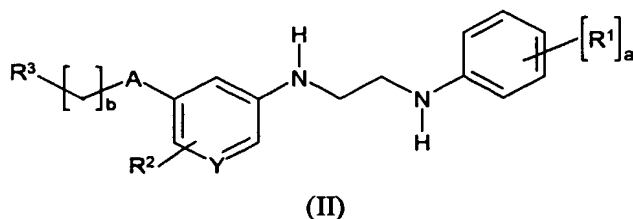


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10. A compound as claimed in any of claims 1 to 9, wherein A is oxygen.
11. A compound as claimed in any of claims 1 to 10, wherein b is 2.
12. A compound as claimed in any of claims 1 to 11, wherein R^3 is N-linked heterocycle or di- C_{1-6} alkylamine.
- 10 13. A compound as claimed in claim 1, which is:
- 1-(3-Fluoro-phenyl)-3-[4-methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-imidazolidin-2-one;
- 1-(3-Fluoro-phenyl)-3-[4-methoxy-3-(2-morpholin-4-yl-ethoxy)-phenyl]-imidazolidin-2-one;
- 1-(4-Methyl-3-trifluoromethyl-phenyl)-3-[4-methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-imidazolidin-2-one;
- 15 1-(4-Methyl-3-trifluoromethyl-phenyl)-3-[4-methoxy-3-(2-morpholin-4-yl-ethoxy)-phenyl]-imidazolidin-2-one;
- 1-(2-Chloro-phenyl)-3-[4-methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-imidazolidin-2-one
- 1-[4-Methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-3-phenyl-imidazolidin-2-one;
- 1-[3-(2-Dimethylamino-ethoxy)-4-methoxy-phenyl]-3-(3-fluorophenyl)-imidazolidin-2-one;
- 20 1-(3-Fluoro-phenyl)-3-{4-methoxy-3[(1S,4S)-2-(2-oxa-5-aza-bicyclo[2.2.1]hept-5-yl)-ethoxy]-phenyl}-imidazolidin-2-one;
- 1-(3,4-Dichloro-phenyl)-3-[4-methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-imidazolidin-2-one;
- 1-(3,4-Dichloro-phenyl)-3-[4-methoxy-3-(2-morpholin-4-yl-ethoxy)-phenyl]-imidazolidin-2-one;
- 25 one;
- 1-(3,4-Dichloro-phenyl)-3-[3-(2-dimethylamino-ethoxy)-4-methoxy-phenyl]-imidazolidin-2-one;
- 1-(3,4-Dichloro-phenyl)-3-[6-(2-piperidin-1-yl-ethoxy)-pyridin-3-yl]-imidazolidin-2-one;
- 1-[4-Bromo-3-(2-piperidin-1-yl-ethoxy)-phenyl]-3-(3,4-dichloro-phenyl)-imidazolidin-2-one;
- 30 1-(2,3-Dichloro-phenyl)-3-[4-methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-imidazolidin-2-one;
- 1-(3-Fluoro-phenyl)-3-[4-methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-1,3-dihydro-imidazol-2-one;
- 1-(3-Fluoro-phenyl)-3-[4-methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-1,3-dihydro-imidazol-2-one;
- 35 imidazol-2-one;
- 1-(3-Fluoro-phenyl)-3-[4-methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-imidazol-2-one;
- 3-(3-Fluoro-phenyl)-1-[4-methoxy-3-(2-piperidin-1-yl-ethoxy)-phenyl]-imidazol-2,4-dione;

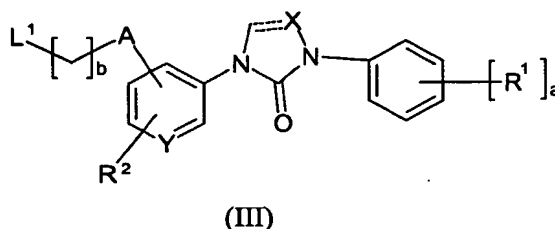
5-[3-(3,4-Dichloro-phenyl)-2-oxo-imidazolidin-1-yl]-3-(2-piperidin-1-yl-ethyl)-3H-benzoxazol-2-one,
or a pharmaceutically acceptable salt thereof.

14. A process for the preparation of a compound of formula (I) or a pharmaceutically acceptable salt thereof, which process comprises:
a) the cyclisation of a compound of formula (II)



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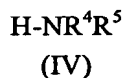
in which R^1 , R^2 , R^3 , A , Y , a and b are defined in formula (I); or
b) the coupling of a compound of formula (III):



(III)

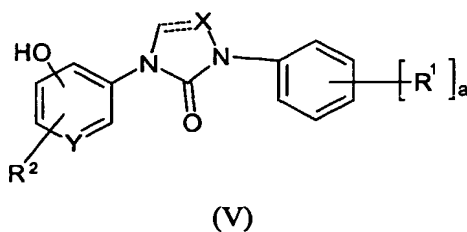
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in which R^1 , R^2 , A , X , Y , a and b are defined in formula (I) and L^1 is a leaving group, with a compound of formula (IV):



(IV)

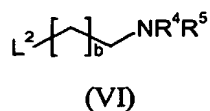
in which R^4 and R^5 are defined in formula (I); or
c) the coupling of a compound of formula (V)



(V)

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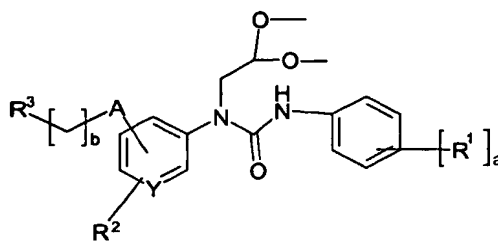
in which R^1 , R^2 , X , Y and a are defined in formula (I), with a compound of formula (VI):



(VI)

25

in which R^4 , R^5 and b are defined in formula (I) and L^2 is a leaving group or hydroxy; or
d) the cyclisation of a compound of formula (VII):



(VII)

in which R¹, R², R³, Y, A, a and b are defined in formula (I);

optionally followed by:

- 5 • removing any protecting groups; and/or
- converting a compound of formula (I) so formed into another compound of formula (I); and/or
- forming a pharmaceutically acceptable salt.
- 15 15. A pharmaceutical composition comprising a compound as defined in any of claims 1-
- 10 13 and a pharmaceutically acceptable carrier or excipient.
16. A process for preparing a pharmaceutical composition as defined in claim 15, the
- process comprising mixing a compound as defined in any of claims 1-13 and a
- pharmaceutically acceptable carrier or excipient.
17. A compound as claimed in any of claims 1-13 or a composition as claimed in claim
- 15 15 for use as a therapeutic substance.
18. A compound or a composition as defined in claim 17 for use in the treatment of a
- CNS disorder.
19. A compound or a composition as defined in claim 17 wherein the CNS disorder is
- depression and/or anxiety.
- 20 20. A method of treatment of a CNS disorder in mammals, comprising administering to
- the sufferer a therapeutically safe and effective amount of a compound as defined in any of
- claims 1-13 or a composition as defined in claim 15.
21. A method as claimed in claim 20, wherein the CNS disorder is depression and/or
- anxiety.
- 25 22. Use of a compound as defined in any of claims 1-13 or a composition as defined in
- claim 15 in the manufacture of a medicament for use in the treatment of a CNS disorder.
23. Use as claimed in claim 22, wherein the CNS disorder is depression and/or anxiety.